



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/290,579	04/13/1999	HIDEKI ASADA	OSP-8028	1042

466 7590 09/02/2003

YOUNG & THOMPSON  
745 SOUTH 23RD STREET 2ND FLOOR  
ARLINGTON, VA 22202

EXAMINER
----------

ALPHONSE, FRITZ

ART UNIT	PAPER NUMBER
----------	--------------

2675

DATE MAILED: 09/02/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/290,579

Applicant(s)

ASADA

Examiner

Fritz Alphonse

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Apr 3, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 90-109 is/are pending in the application.
- 4a) Of the above, claim(s) 91-95, 97, 99-103, 105, and 107-109 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 90, 96, 98, 104, and 106 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 2675

## **DETAILED ACTION**

### ***Response to Amendment***

Newly submitted claims 91-95, 97, 99-103, 107-109 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:[1] independent claims 91, 99 and 107 are directed to species related to figs. 3, 10, 13, etc. [2] independent claims 92, 94, 95, 100, 102, 108 are directed to species related to fig. 3 [3] claims 93, 97, 101, 103, 105, 109 are directed to species correspond to figs. 10, 12, 13 etc. [4] In response to the Office Action mailed July 3, 2002, species corresponding to fig. 1 have been elected. The election is final, therefore, an Office Action on the merits for species corresponding to fig. 1 is included.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 91-95, 97, 99-103, 105, 107-109 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 90, 96, 106, are rejected under 35 U.S.C. 102(b) as being anticipated by Shiraki (U.S. Pat. No. 5,844,538).

Art Unit: 2675

As to Claim 90, Shiraki (fig. 29) shows an active matrix-type liquid crystal display device comprising a pixel electrode (Cp) and a MOS transistor circuit (TR), the pixel electrode (Cp) being driven by the MOS transistor circuit (TR), the MOS transistor circuit (TR) disposed in the vicinity of a cross-over point of one of a plurality of scanning lines and one of a plurality of signal lines (note the position of the scan signal line and data line in figure 29), the MOS type transistor circuit comprising: a first MOS transistor (TR), in which a gate electrode is connected to the scanning line (i.e., scan signal line), and one of a source electrode and a drain electrode is connected to the signal line (note the position of data signal line in figure 29); and an analog amplifier (109), in which an input electrode is connected to the other one of the source electrode and the drain electrode of the first MOS transistor and a power supply electrode is connected to the scanning line, and an output electrode (common electrode) is connected to the pixel electrode (Cp).

As to claim 96, method claim 96 corresponds to apparatus claim 90, therefore, it is analyzed as previously discussed in claim 90 above.

As to claim 106, Shiraki (fig. 29) shows an active matrix-type liquid crystal display device, wherein the MOS transistor circuit (TR) is formed by integrating thin film transistors.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having

Art Unit: 2675

ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 98 and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraki.

As to claim 98 Shiraki (fig. 29) shows an active matrix-type liquid crystal display device comprising a pixel electrode (Cp) and a MOS transistor circuit (TR), the pixel electrode (Cp) being driven by the MOS transistor circuit (TR), the MOS transistor circuit (TR) disposed in the vicinity of a cross-over point of a plurality of scanning lines and a plurality of signal lines (note the position of the scan signal line and data line in figure 29), the MOS type transistor circuit comprising: a first MOS transistor (TR), in which a gate electrode is connected to an Nth scanning line (i.e., scan signal line), N being an integer of 2 or more, and one of a source electrode and a drain electrode is connected to the signal line (note the position of data signal line in figure 29); and an analog amplifier (109).

Shiraki does not disclose an active matrix-type liquid crystal display device in which a gate electrode is connected to the other one of the source electrode and the drain electrode of the first MOS transistor.

However, this is obvious, it would have been obvious to one of ordinary skill in the art at the time of the invention to connect the electrode of MOS transistor (TR) of the picture element circuit to the other one of the source electrode and the drain electrode of transistor (110), as disclosed by Shiraki (see figure 30). Doing so would increase the performance of the active matrix-type liquid crystal display device.

Art Unit: 2675

As to claim 104, method claim 104 corresponds to apparatus claim 98, therefore, it is analyzed as previously discussed in claim 98 above.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz Alphonse whose telephone number is (703) 308-8534.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras, can be reached on (703) 305-9720.

**Any response to this action should be mailed to:**


Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:** (703) 872-9314 (for Technology Center 2600 only)


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

  
F. Alphonse

Art Unit: 2675

August 22, 2003

  
**STEVEN SARAS**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**